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Transfer of charges and substances in a gas-discharge plasma from the liquid electrolyte cathode containing salts of alkali metal

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Abstract

© Published under licence by IOP Publishing Ltd. A gas discharge in the air between the flowing liquid cathode and a solid anode was studied experimentally. Aqueous solution of sodium chloride was used as the liquid cathode electrolyte. Mass loss due to evaporating and sputtering was compensated by adding distilled water in a continuous mode. It was found that the specific electric conductivity of the aqueous solution is almost unchanged. The regularities of changes in the composition of an anionic solution were discovered.

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